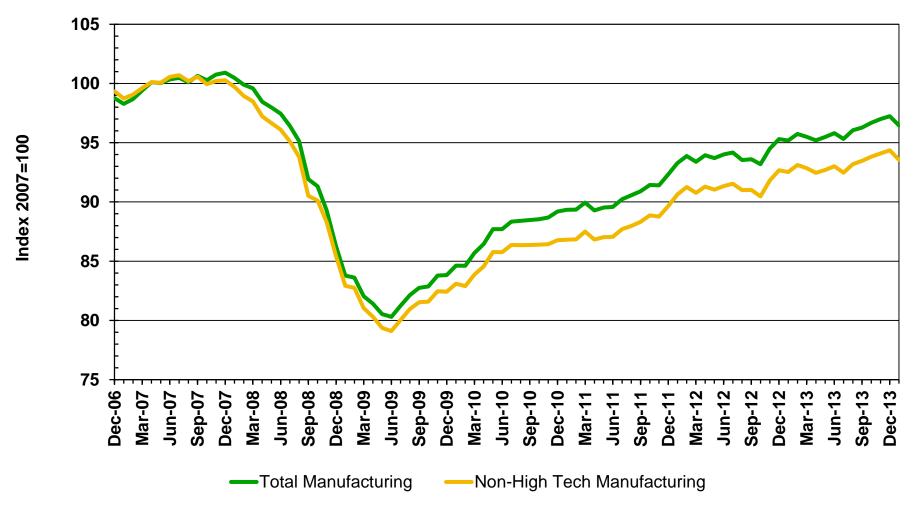


A U.S. Manufacturing Resurgence Can The U.S. Turn A Cyclical Rebound Into A Resurgence?

Presented by:
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U.S. Manufacturing Is Only 78 Percent Recovered

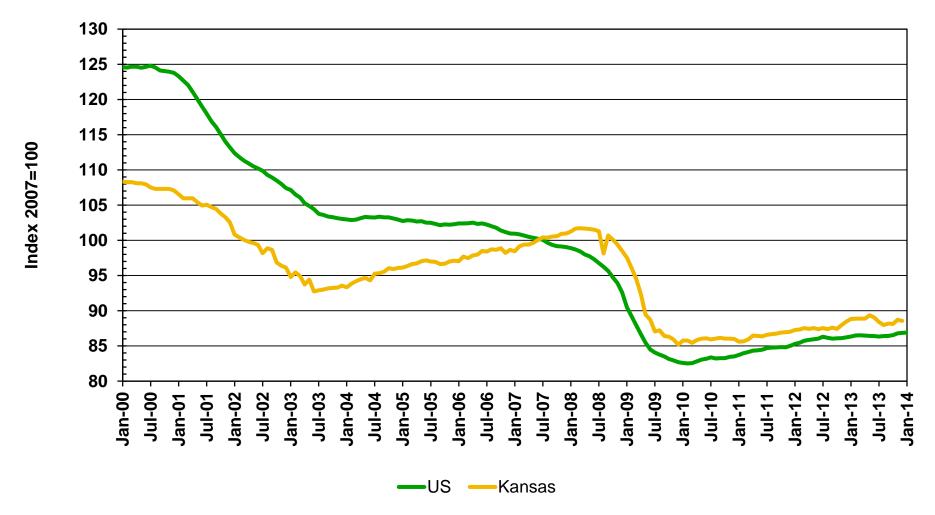
Manufacturing Industrial Production





Manufacturing Adding Jobs Again. Cyclical Recovery or Resurgence?

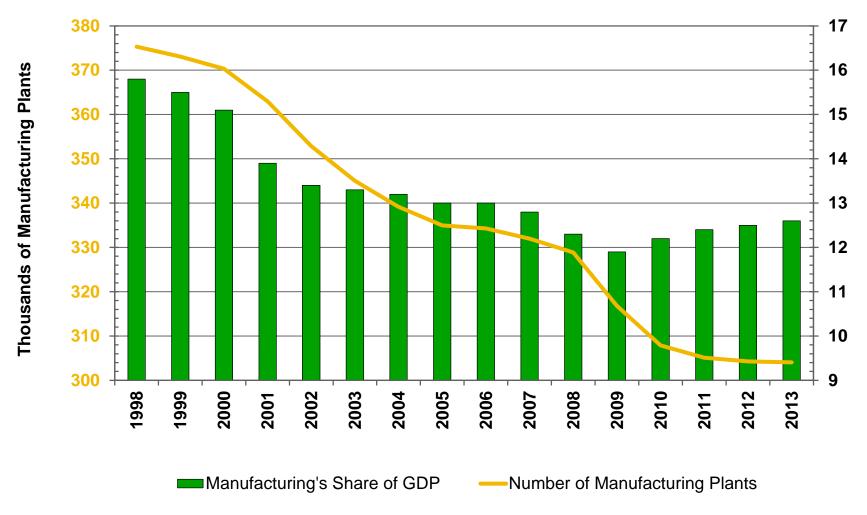
Manufacturing Employment





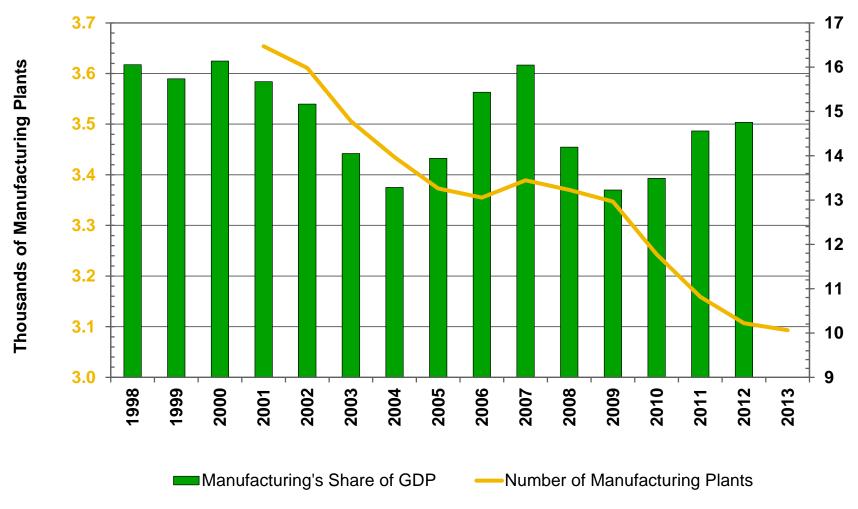
A Cyclical Recovery in Manufacturing Share of GDP; Number of Plants Starting to Level Out

U.S. Manufacturing Plants and Share of Economic Output





Kansas Manufacturing Plants and Share of Economic Output





Porter Finds U.S. Very Competitive, Weaknesses Are Policy Driven

United States National Competitiveness

Factor Conditions

Strenaths:

- Workforce: very large, well-educated, skills-diverse.
- Finance Capital: high risk capital availability; highly-developed capital markets
- Infrastructure: extensive physical infrastructure systems including transport, water & sewer, energy, information & communications.

Weaknesses:

- Infrastructure: aging systems losing reliability; "D+" grade by ASCE
- Administration: highly-fractured governance; highly complex permitting and regulatory inconsistency

Context for Strategy and Rivalry

Strengths:

- Inter-firm competition: huge, highly-productive private sector; home to most MNCs; intense entrepreneurship culture; ranked 4th by World Bank for 'Doing Business'; 7th in GCI
- Openness: most sectors highly exposed to foreign competition; ranked 10th in economic freedom
- IP Protection: highly-developed, well enforced IP institutions and laws
- Flexible labor markets: ranked 6th in GCI

Weaknesses:

- Taxation: comparatively high levels of corporate taxation
- Political Leadership: Partisan gridlock weakens economic policy development and coordination.

Demand Conditions

Strengths:

- Market Size: world's largest consumer market; low savings rate; extensive commercial infrastructure; ranked 1st in GCI
- Government Demand; high levels of government procurement activity
- Sophisticated demand: high quality, safety, and environmental standards; extensive consumer protections

Weaknesses:

- · GDP: long-term real GDP growth decline
- Consumer confidence: economic pessimism driving increase in savings

Related and Supporting Industries

Strengths:

- Clusters: multi-sector, multi-regional traded cluster development
- Innovation and R&D: high-levels of public and private R&D investment; high patent activity
- · Export sector: suppliers compete globally

Weaknesses:

Focused on policy lobbying rather than industrial cooperation



Economics Is Moving In Favor of U.S. Production

Economic Reasons For More Local Sourcing Versus Offshoring

- Value of the dollar-down 20% since 2002
- Cost of shipping-air, truck, ocean
- Natural disaster supply disruption-tsunami, earthquake, volcano, flood
- Slow growth in U.S. manufacturing unit labor cost in the last 10 years
- Very low natural gas price in the U.S.
- Rapid increase in labor costs in China (developing countries)
- Customer demand for just-in-time delivery and collaboration



The Other Costs of Offshoring

Vendor Costs

- The cost of adding a new supplier
- The travel costs to visit them or vice versa
- Are they able to keep you ahead of your competition
- The difficulty in managing an extended supply chain
- High turnover? The time/money training them
- Legal cost and intellectual property protection

Usage Costs

- Additional inventory
- Will quality or delivery issues shutdown your plant?
- The cost of rework or warranty costs
- Speed to market
- R&D capabilities
- Tooling

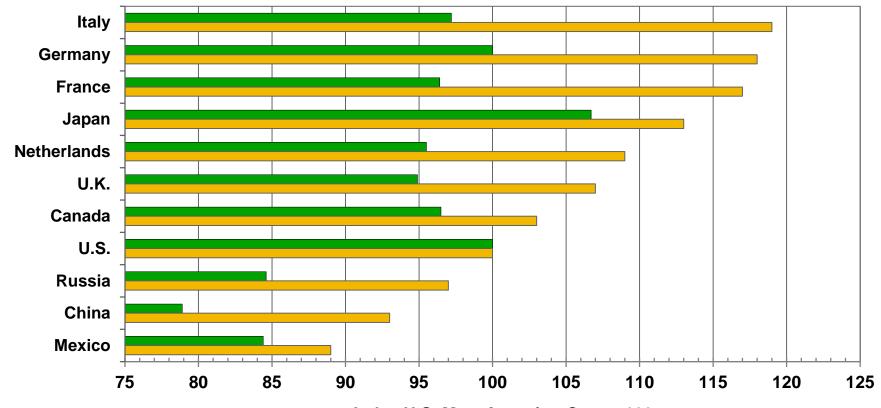
Transaction Costs

- Need for expediting
- Freight cost, tariffs, insurance
- Inspection costs



U.S. Has an Operating Cost Advantage With Advanced Countries When Productivity Is Factored In

U.S. Manufacturing Cost Competitiveness With Selected Countries, 2012



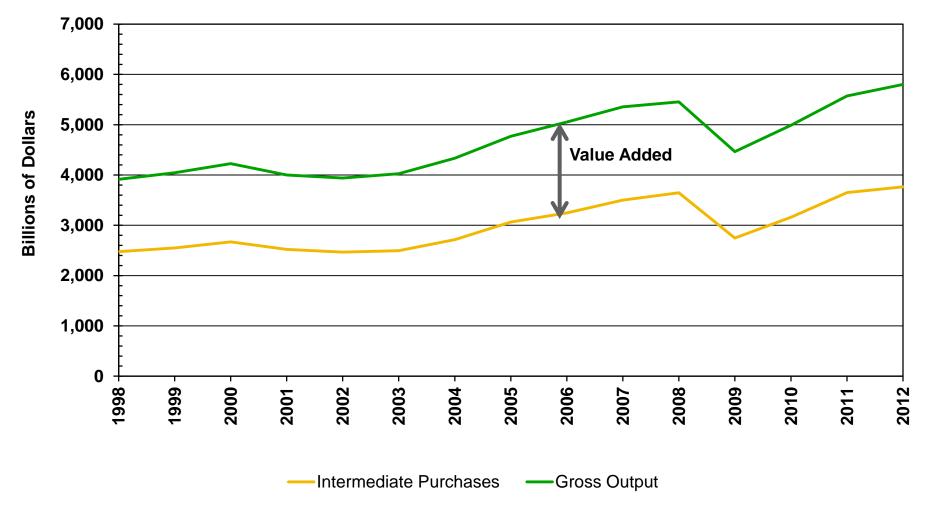
Index U.S. Manufacturing Costs=100 Less Cost Than U.S. <100> More Costly Than U.S.

■KPMG ■BCG



The Sourcing Decision for Domestic or Foreign Outsourcing Determines Whether There Is A Resurgence

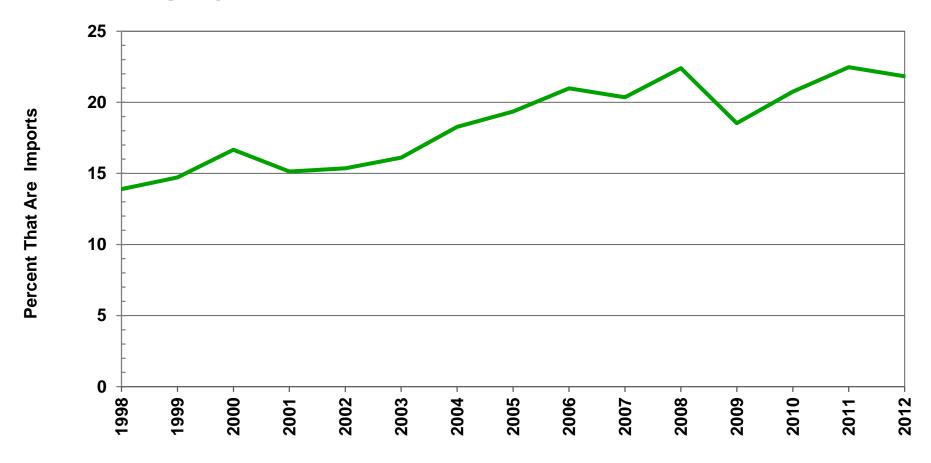
Manufacturing Gross Output and Intermediate Purchases





The Import Share of Intermediate Manufacturing Purchases May Be Flattening Out

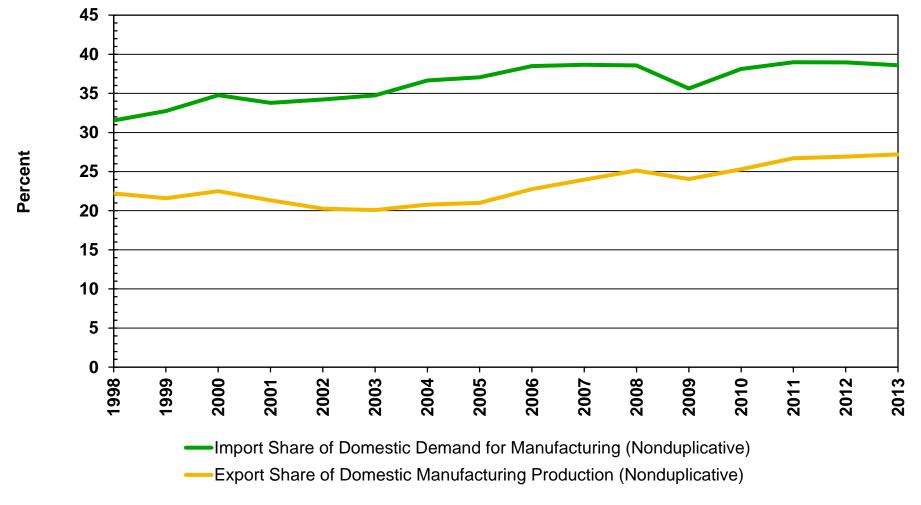
Manufacturing Import Share of Intermediate Purchases of Manufactured Goods





A Sign of Progress Is Manufacturing Trade Is Moving In A Favorable <u>Direction</u>

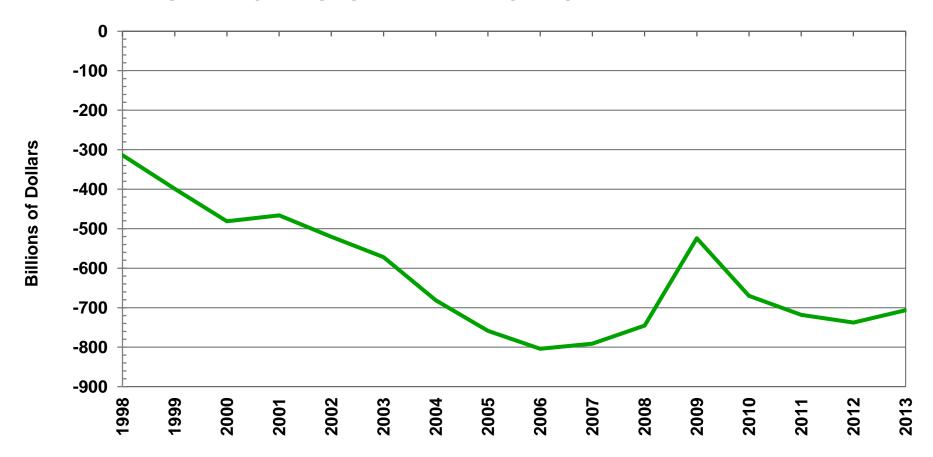
Import and Export Shares in Manufacturing Commodities





The Trade Deficit In Manufacturing Somewhat Improved

Manufacturing Net Exports (Exports Minus Imports)





Manufacturing Resurgence Simulation Returns Share of GDP to Near 16 Percent by 2025

Value Added By Industry

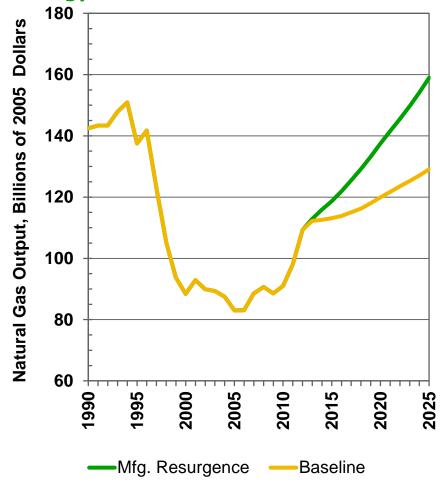
	Percent of GDP*			
	1998	2012	Baseline 2025	Mfg. Resurgence 2025
Agriculture, forestry, fishing	1.1	1.1	1.0	1.0
Mining	1.0	1.9	2.9	2.9
Construction	4.4	3.7	4.4	4.0
Manufacturing	15.1	11.6	11.1	15.8
Wholesale and retail trade	13.8	12.2	11.4	10.8
Transportation services	3.2	3.1	3.2	3.2
Finance, insurance, real estate	19.2	20.0	21.1	19.9
Professional, business services	10.6	12.0	12.2	11.9
Education, health, social services	6.9	8.6	9.6	8.7
All government	12.5	13.2	11.3	11.1

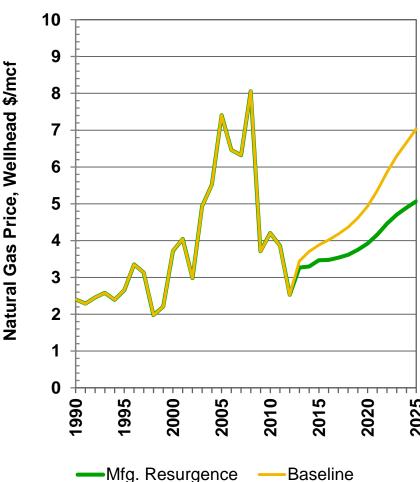
^{*}Not all sectors are listed, totals do not add to 100 Source(s): MAPI-Aspen-Inforum Study, The Manufacturing Resurgence



New Natural Gas Shifts Out the Supply Curve, Increases Competitiveness

Ample Natural Gas Supplies Drive Down Price, Provide Incentive to Onshore Energy Intensive Activities

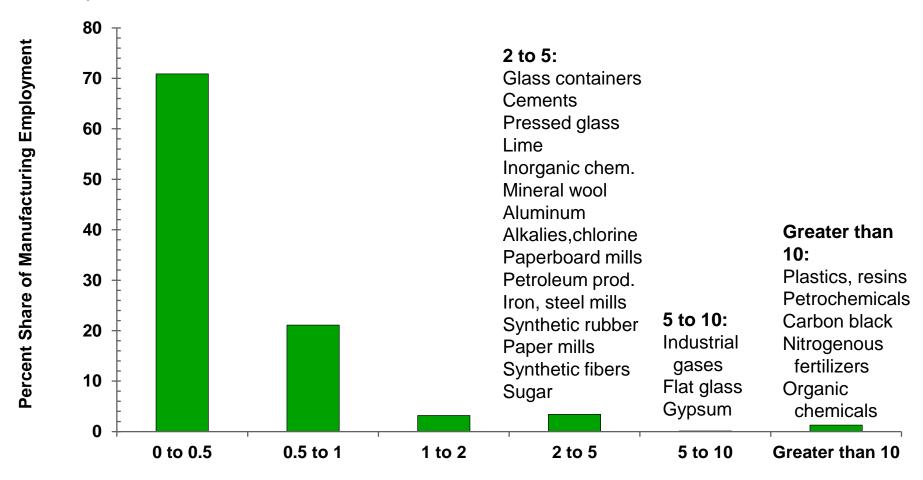






Unconventional Oil and Natural Gas Is Important, But Not the Game Changer

Distribution of U.S. Manufacturing by Potential Cost Reduction from Lower Energy Prices, 2011

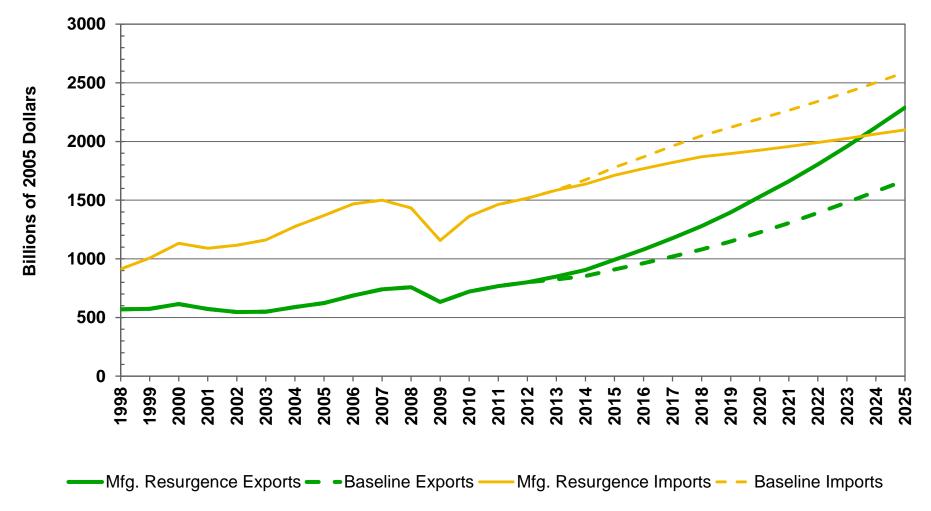


Reduction in Energy Costs as a Share of Shipment Value (Percent)



Two-Thirds of the Resurgence Comes From Trade

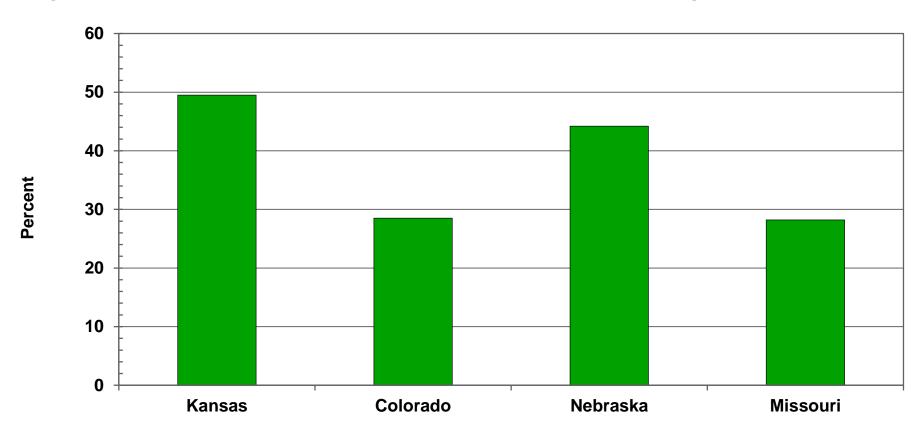
Boosting Real Manufacturing Demand: Exports and Imports





Kansas Needs More Diverse International Exports

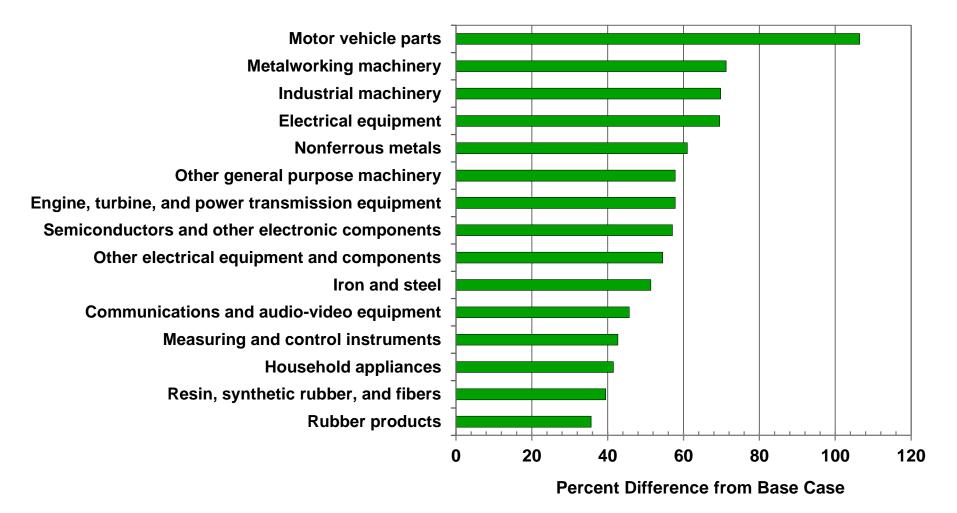
Top Ten Commodities as a Share of Total State International Exports, 2013





Industries Supporting Business Investment Benefit Most From A Manufacturing Resurgence

Output of Top 15 Producing Sectors (Billions of 2005\$), 2025

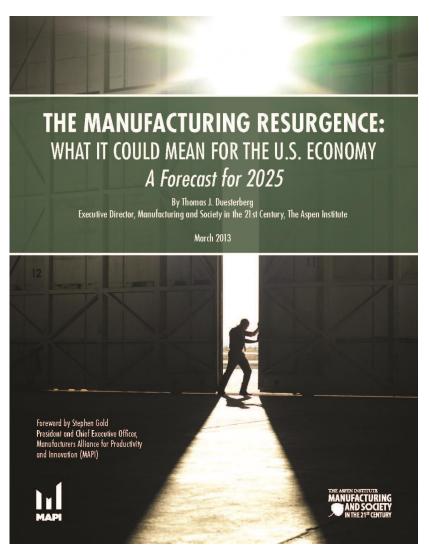




No Radical Policy Changes Needed, Accelerate Current Plans

Supportive Policies Needed

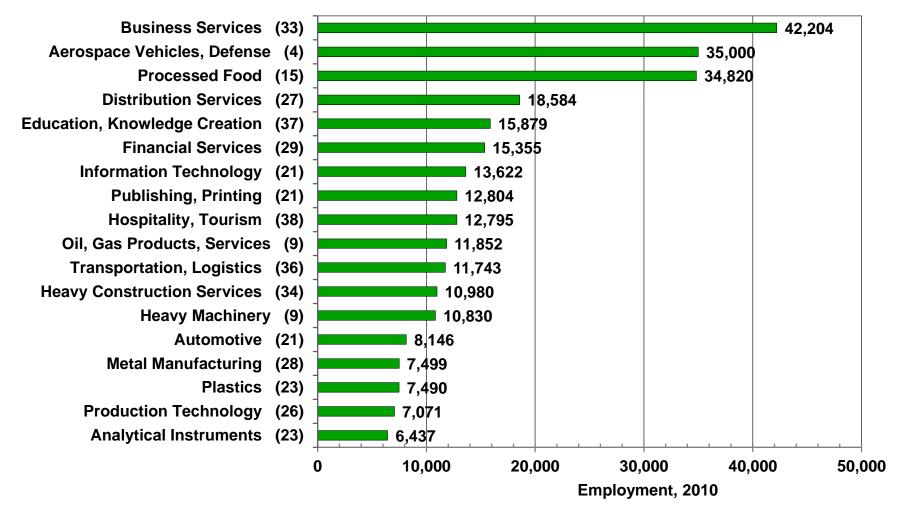
- Trade Policy
- Energy Policy
- Regulation
- Skilled Workforce
- Tax Policy
- Technology Policy





Kansas Excels in Four Clusters

Kansas Employment by Traded Cluster, 2010

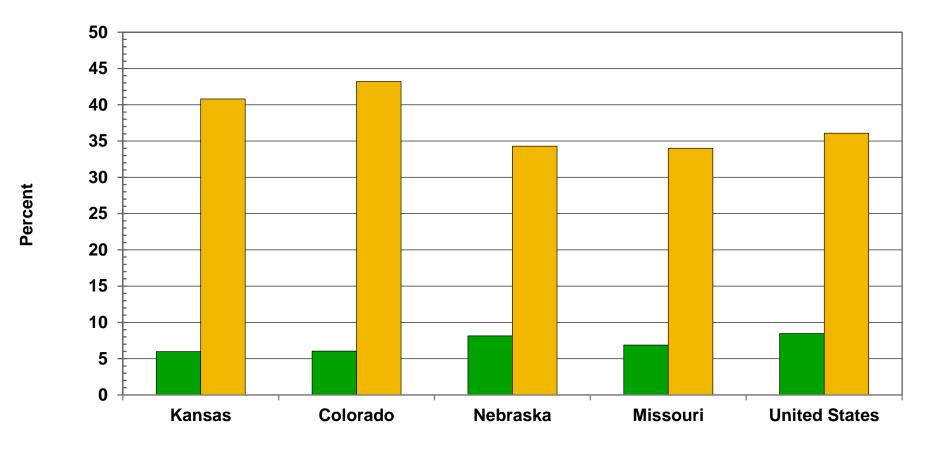


Note: Numbers in parentheses display employment rank in the U.S. 1 is fist, 50 is last. Source(s): Harvard Cluster Mapping, Michael E. Porter



A Relatively Competitive Region for Educational Attainment

Educational Attainment, Percent of Civilian Labor Force, 2012



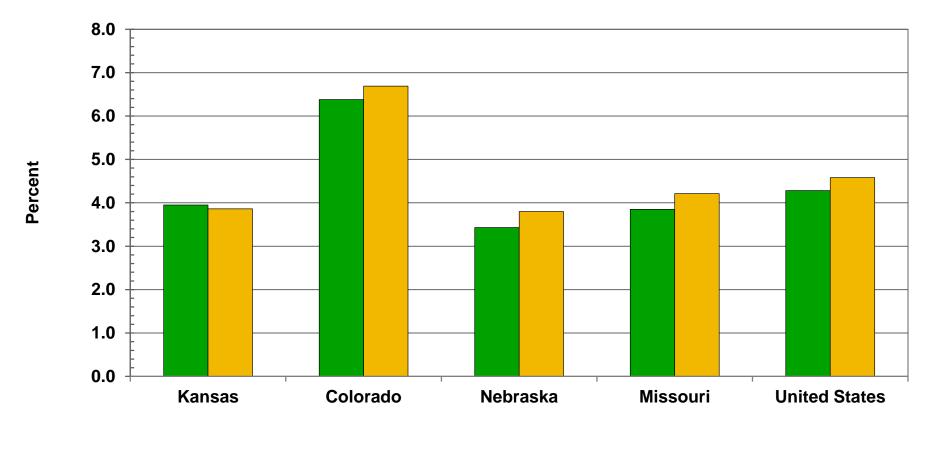
■ Less than a high school diploma

■ Bachelor's degree and higher



The Region Holds Its Own in the Size of the R&D Workforce

Full Time Equivalent Science and Engineering Employment as a Percent of the Labor Force





■2008 **■**2012

The Complaints Are The Same—County Executives, SMEs, and Multinational CEOs

What Colorado County Economic Development Executives Say They Need For Growth

- The state to be more pro-business
- Get rid of red tape
- Better access to capital
- Better trained work force
- Market the state as a place for entrepreneurs and where businesses can grow
- Focus on technology and innovation



Some Recommendations

Leverage Existing Clusters

- Build bridges between firms and universities for joint R&D
- Transfer university R&D, Fed labs, and manufacturing innovation institute technology to entrepreneurs
- Have a targeted recruitment and retention plan for firms in clusters
- Develop co-locating supplier base
- Identify and Nurture Gazelles and Recruit Foreign Firms
- Skilled Workforce
 - Align workforce skills with market need, retrain when skills change
 - Training partnership with colleges, industry, worker oversight boards
 - Create a high quality of life to recruit and retain talent
- Aid the Development of Export Markets in Emerging Countries
 - Missions, Federal Exim bank, leverage embassies
- Train and Promote Entrepreneurship

